

Jackson Wheeler

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Technically advanced Software Engineer with a deep understanding and practical experience in **Embedded Software**, **Computer Networks**, **Web Development**, and **general Software Engineering**. Seeking internship opportunities where my technical & personal skills can collide to deliver solutions and solve problems.

EDUCATION

University of California, San Diego

Sept. 2020 – June 2024

B.S. Computer Science / GPA: 3.82

Yonsei University, South Korea

Summer – Fall 2022

Exchange Program (Courses: Compiler Design, Computer Vision, Korean Lang.)

WORK

Software Engineer Intern | *Marine Corps Tactical Systems Support Activity (SaxmanOne)*

Summer 2021

Developed & implemented code for the **automated testing** of a military Windows application.

- **Discovered** and **implemented** WinAppDriver as superior tool over Winium for Windows application automation
- **Trained** teammates in the usage of WinAppDriver in Windows application automation

PROJECTS (VISIT PORTFOLIO WEBSITE FOR MORE DETAILS!)

IoT Project - Embedded Team (C++) | *Arduino Board*

Spring 2023

- Deployed code to 25 IoT Arduino boards for data collection in UCSD's Fitness Center during May 2023
- Implemented **WiFi** & **BLE** capabilities with logging data to **API** on embedded devices

API - IoT Device to SQL (Python) | *Apache, MySQLWorkbench*

Spring 2023

- Implemented API that logs data from **IoT devices**, through HTTP request, to our backed **SQL database**

Implementing Operating System (Java) |

Spring 2023

- Implemented system calls, **multi-programming**, **on-demand paging**, and **swapping** in the Nachos OS

JotForm Logging to REST API (JavaScript) |

June 2023

- **Manipulated** source code of created JotForm form to direct user data to REST API

ChatGPT Console App (C#) | *.NET core, API*

May 2023

- Developed **.NET core** console application allowing chatting with ChatGPT in **real time** via OpenAI **API**

Network Router Implementation (C) | *Networking Protocols: Ethernet, ARP, IP, ICMP*

March 2023

- Developed code to **accurately & efficiently route** and send incoming packets to the next step in the network.
- **Improved efficiency** by implementing custom data structures

Sliding Window Protocol (C) | *Networking Protocols: Sliding Window, CRC-8, Framing*

February 2023

- Implemented sliding window protocol, ensuring **reliable in-order delivery** of messages b/w senders and receivers

Portfolio Website (HTML, CSS, JS) |

Winter 2023

- Implemented functional website in HTML, CSS, and JavaScript, with **user experience** in mind

Team: San Diego Zoo Exhibit Navigation App (Java) | *Android Studio, Agile*

Spring 2022

- Developed application to direct users on **customizable tour** of the San Diego Zoo, based on desired exhibits

Mutual Fund Analysis Program (Python) | *Selenium, XlsxWriter*

Summer 2020

- **Web scrapes** mutual fund data from Charles Schwab, outputting **detailed Excel file** for analysis

Reinforced Learning Snake Game (Python) | *NEAT-Python, Pygame*

Summer 2020

- In pair, created program utilizing **machine learning** to teach computer to play the snake game

SKILLS

Languages: C, Java, Python, C#, C++; SQL, HTML, CSS, JavaScript; Bash; Haskell

Tools: Linux, .NET, APIs, Visual Studio, Arduino IDE & Boards, MySQLWorkbench

Courses: Computer Networks, Operating Systems, Software Engineering, Web Development, Databases, & more...

Active Secret Level Security Clearance